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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,250

04/01/2004

Hrvoje Jasa

JASA 3-4-1

6960

7590

07/28/2005

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EXAMINER

COX, CASSANDRA F

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/814,250

Applicant(s)

JASA ET AL.

Examiner

Cassandra Cox

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/01/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 16 are indefinite because the claims are misdescriptive. The claims disclose comparing a frequency output from any of the plurality of voltage controlled oscillators to a reference frequency, and using the accumulator output to control a frequency output from any one of the plurality of voltage controlled oscillators. However, it is the examiner's understanding that the only the voltage controlled oscillator(s) selected by the state machine for calibration will be used in the frequency locked loop and subsequently controlled by the accumulator output. In addition it

appears to the examiner that the accumulator is a part of the frequency locked loop. It appears to the examiner that limitation of "a frequency locked loop to compare a frequency output from any of said plurality of voltage controlled oscillators to a reference frequency", actually refers to the frequency discriminator or comparator (122) and not to the frequency locked loop itself. Correction or clarification is required.

Claims 12-15 and 17-20 are also rejected due to the limitations of the base claims and any intervening claims.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Kenney et al. (U.S. Patent No. 6,803,827).

In reference to claim 1, Kenney discloses in Figure 3 a method of calibrating a voltage controlled oscillator comprising: comparing a frequency of an output of a first voltage controlled oscillator (112a) to a reference frequency (FREFCLK, this is done by frequency detector 126a); accumulating a first digital value relating to a difference in frequency between the output of the first voltage controlled oscillator (112a) and the reference frequency (FREFCLK), this is done by accumulator 128; and controlling a

frequency of the output of the first voltage controlled oscillator based on the accumulated digital value (see column 6, lines 11-26).

In reference to claim 2, Kenney discloses in Figure 3 converting the accumulated first digital value into a first analog signal for control of the first voltage controlled oscillator (112a), this is done by DAC SYSTEM 130.

***Allowable Subject Matter***

6. Claims 8-10 are allowed.
7. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claims 11 (and thereby claims 12-15) and 16 (and thereby claims 17-20) would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
9. The following is a statement of reasons for the indication of allowable subject matter: Claim 3 would be allowable because the closest prior art of record fails to disclose a circuit wherein the method further comprises scanning the accumulated first digital value into a built-in self test path in combination with the rest of the limitations of the base claims and any intervening claims. Claims 4-7 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the method includes accumulating a second digital value (Vc2) and controlling a frequency of a second voltage controlled oscillator (102) based on the accumulated second digital value (Vc2) in combination with the rest of the limitations of the base claims and any

intervening claims. Claims 11-20 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the circuit includes a state machine (130) to select a calibration mode for any of the plurality of voltage controlled oscillators (101-104) and using the output from the selected oscillator in the frequency comparator (122) in combination with the rest of the limitations of the base claims and any intervening claims (this reason for allowable subject matter is based on the examiner's current understanding of the claims).

10. The following is an examiner's statement of reasons for allowance: Claims 8-10 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the method includes selecting a calibration mode for at least one voltage controlled oscillator, while another voltage controlled oscillator is in operational mode and using the selected oscillator in the comparing accumulating and controlling steps in combination with the rest of the limitations of the base claims and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

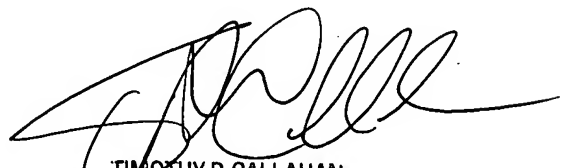
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Cox whose telephone number is 571-272-1741. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and on alternate Fridays from 7:30 to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CC  
CC

July 14, 2005

  
TIMOTHY P. CALLAHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800